# **Participant Questionnaire**

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Participant number: _	2

Date: 6/29/23

Location: Brescia, I

HRC Study / Algorithms tested: HAMP

Study Conducted by:

Participant link lengths/dimensions: (meters, "spine" is pelvis to shoulder midpoint, "shoulders" is shoulder to shoulder)

Spine	
Neck	
Shoulders	,34

Left Upper Arm	.31
Left Forearm	.27

Right Upper Arm	-21
Right Forearm	.24

Participant joint diameter: (meters)

Left Elbow	.09
Left Wrist	.858

<b>Right Elbow</b>	.10
Right Wrist	,062

### **Questions:**

- A. How safe did you feel? (0 is not safe at all, 5 is neutral, 10 is very safe)
- B. Do you think the robot hindered your motions during the task? (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)
- C. Did the robot perform logical motions? (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)
- D. What is your overall satisfaction with the HRC task? (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

## For Task 1 (engine parts): (circle your answer to each question)

Task 1, Me	ethod 1:				2 -			E .	a - 1	
Question /	A: (0 is not	safe at all, !	is neutral	, 10 is very	safe)				10.0	
. 0	1	2	3	4	5	6	7	8	<b>(2)</b>	10
Question I	B: (0 is rob	ot complete	ly prevent	ed your mo	tions, 5 is r	neutral, 10 i	s robot did	not imped	e you motio	on)
0	1	2	3	4	5	6	Xno	8		10
Question	C: (0 is rob	ot motions	made no se	ense to you	, 5 is neutra	al, 10 is rob	ot motions	made sens	se to you)	
0	1 .	2	3	4	5	6	7	8	<b>3</b>	10
Question D	: (0 is you w	ould not wo	rk in this HR	C cell again,	5 is neutral,	10 is you en	joyed workir	ng in this ce	ll with the ro	bot)
0	1	2	3	4	5	6	7	8	<b>8</b>	10

Task 1, M	ethod 2:			1.7						
Question	A: (0 is not	safe at all,	5 is neutral	, 10 is very	safe)	1, 2	*	F.		
0	1	2	3	4	5	6	<b></b>	8	9´	>10 <sub>NO</sub>
Question	B: (0 is rob	ot complete	ely prevente	ed your mo	otions, 5 is i	neutral, 10 i	is robot did	not impede	e you moti	on)
0	1	2	3	4	5	•	7	> No	9	10
Question	C: (0 is rob	ot motions	made no se	ense to you	, 5 is neutr	al, 10 is rob	ot motions	made sens	e to you)	
0	1	2	3	4	5	6	<b>②</b>	8	9	DEC NO
Question [	): (0 is you w	ould not wo	rk in this HR	C cell again,	5 is neutral	, 10 is you er	njoyed worki	ng in this cel	with the re	obot)
0	1	2	3	4	5	6	7	8	. 9	20 No

Task 1, Me	ethod 3:					3				
Question A	A: (0 is not	safe at all,	5 is neutral	, 10 is very	safe)					
0	1	2	3	4	5	6	7	•	9	10 No
Question	B: (0 is rob	ot complete	ely prevent	ed your mo	itions, 5 is r	neutral, 10	is robot did	not imped	e you moti	on)
0	1	2	3	4	5	6	<b>Ø</b>	8	9	200
Question (	C: (0 is rob	ot motions	made no se	ense to you	, 5 is neutr	al, 10 is rob	ot motions	made sens	se to you)	100
0	1	2	3	4	5	6	•	8	9	MNO
Question D	: (0 is you w	ould not wo	rk in this HR	C cell again,	5 is neutral,	10 is you e	njoyed worki	ng in this ce	ll with the re	obot)
0	1	2	3	4	5	6		8	9	20 NG

### **Comments:**

Participant number:	_2_	Date:
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### For Task 2 (Sharework parts: metal tabs, cylinders, pallets): (circle your answer to each question)

Task 2, Me	ethod 1:								100		
Question	A: (0 is not	safe at all, 5	is neutral	, 10 is very	safe)						
0	_1	2		4	5	6	7	8	9	10	
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)											
0	1	2	3	4	×	6	7	8	9	10	
Question	C: (0 is robo	ot motions i	made no se	ense to you	, 5 is neutra	al, 10 is rob	ot motions	made sens	e to you)		
0	1	2	3	×	5	6	7	8	9	10	
Question D	Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	<b>1</b>	2	3	4	×	6	7	8	9	10	

Task 2, M	ethod 2:				d.		2.5			
Question	A: (0 is not	safe at all,	5 is neutral	, 10 is very	safe)				100	
0	1	2	<b>3</b>	4	5	6	X	8	9	10
Question	B: (0 is rob	ot complete	ely prevent	ed your mo	tions, 5 is n	eutral, 10	is robot did	not imped	e you motic	on)
0	1	2	3	4	5	6	X	8	9	10
Question	C: (0 is rob	ot motions	made no se	ense to you	, 5 is neutra	al, 10 is rob	ot motions	made sens	e to you)	
0	1	2	3	4	×	6	7	8	9	10
Question [	): (0 is you w	ould not wo	rk in this HR	C cell again,	5 is neutral,	10 is you er	ijoyed workii	ng in this cel	l with the ro	bot)
0	1	2	3	4	5	6	×	8	9	10

Task 2, Mo	ethod 3:	P								
Question	A: (0 is not	safe at all,	5 is neutral	, 10 is very	safe)		4			
0	1	2	3	4	5	6	7	×	9	10
Question	B: (0 is robo	ot complete	ely prevent	ed your mo	tions, 5 is r	neutral, 10	is robot did	not imped	e you moti	on)
0	1	2	3	4	5	6	X.	8	9	10
Question	C: (0 is robo	ot motions	made no se	ense to you	, 5 is neutra	al, 10 is rob	ot motions	made sens	e to you)	
0	1	2	3	4	5	6	7	×	9	10
Question [	): (0 is you w	ould not wo	rk in this HR	C cell again,	5 is neutral,	10 is you er	njoyed worki	ng in this cel	l with the ro	bot)
0	1	2	3	4	5	6	7	×	9	10

#### **Comments:**

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